

Interactive comment on “Comparison of OH concentration measurements by DOAS and LIF during SAPHIR chamber experiments at high OH reactivity and low NO concentration” by H. Fuchs et al.

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We thank the reviewer for his/her comments. Here are our responses to the specific comments:

Comment: The authors state that the NO concentrations were determined by the photostationary state between O₃ and NO₂. Did the authors assume that deviations from the photostationary state by peroxy radicals were zero? Did the measurements

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of peroxy radicals confirm the assumption? This should be clarified.

Response: NO concentrations were measured by a chemiluminescence detector (see response to referee 2). We will cancel the statement “NO concentrations were determined by the photostationary state 15 between NO₂ and O₃ (Fig. 1).” on p2086 l14 to avoid confusion about this point.

Comment: Although the authors state that peroxy radicals were measured during the experiment, there is no discussion of the measurements. Were the measured concentrations similar to what was measured during PRIDE-PRD2006? If not, what implications do the measurements have on the applicability of these chamber experiments to the campaign conditions?

Response: HO₂ concentrations were within the same range as found during the PRIDE-PRD2006 campaign. We will add a statement on p2086 l15: “HO₂ concentrations were between 1×10^8 and 2×10^9 cm⁻³, similar to peroxy radical concentration during PRIDE-PRD2006.”

Interactive comment on Atmos. Meas. Tech. Discuss., 5, 2077, 2012.

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